XX OIL PALM International Conference

THE TRANSFORMATIVE POWER OF OIL PALM

THE VEGETABLE OIL MARKET TODAY

Presentation by

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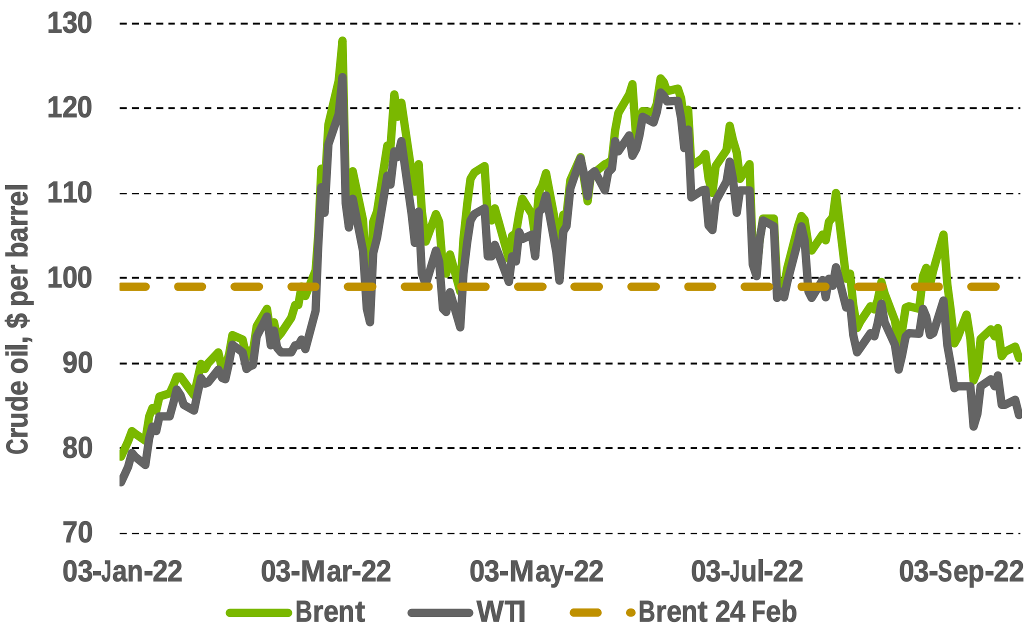
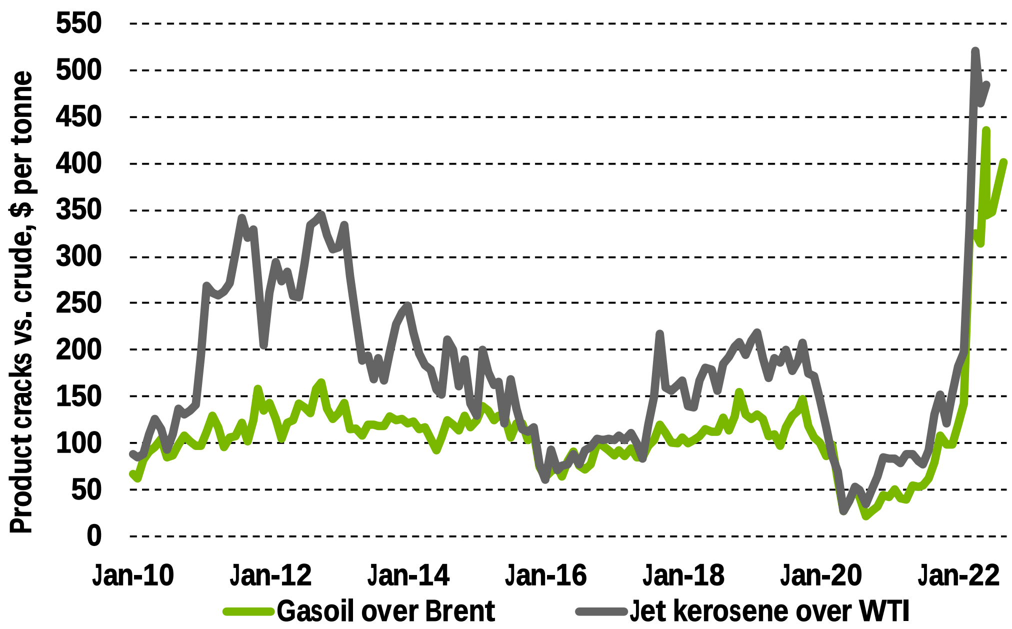
I will start with the mineral oil market

Crude oil prices, on the left, survived Putin's war surprisingly well. They are back where they were before he invaded. The chaos affected refined petroleum products whose "cracks" over crude oil exploded. The left diagram focuses on the cracks of greatest relevance to vegetable oils: gasoil over Brent (since gasoil is the fossil fuel competitor for biodiesel) and jet kerosene over WTI (as Sustainable Aviation Fuel, SAF, substitutes for jet fuel). After long trading close to $100, the gasoil crack has recently been in the $300-$400 range and the kerosene crack is near $500/tonne.

Brent and WTI crude are back below levels when Putin invaded

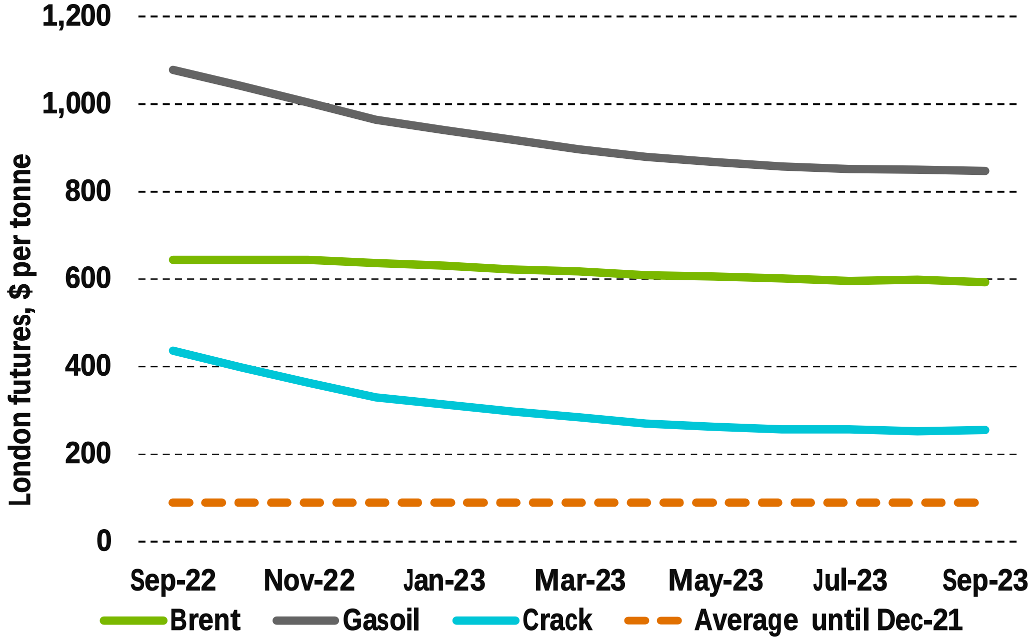


EU gasoil and U.S. jet kerosene cracks over local crude

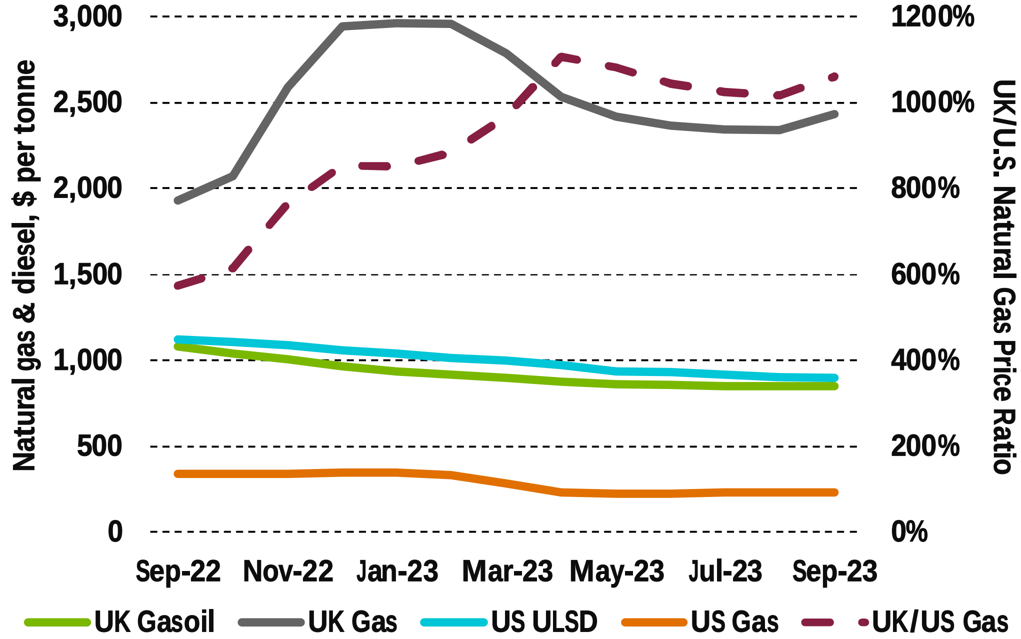


Futures imply cracks will decline over the next year, but remain above the 2000-2021 average, despite Indian refiners buying cheap Russian crude to boost refined exports. High gasoil prices are vital for vegetable oils as they provide a floor to prices via the link between biodiesel and diesel. The right diagram shows why natural gas is at the centre of the EU's economic war with Russia. I contrast here UK and U.S. diesel and natural gas futures in diesel equivalents per tonne. The dashed line reveals that UK users will shortly pay over <u>ten times</u> as much as those in the U.S!

The structure of UK petroleum product futures, mid-September



Adding natural gas to the prices of fossil fuels

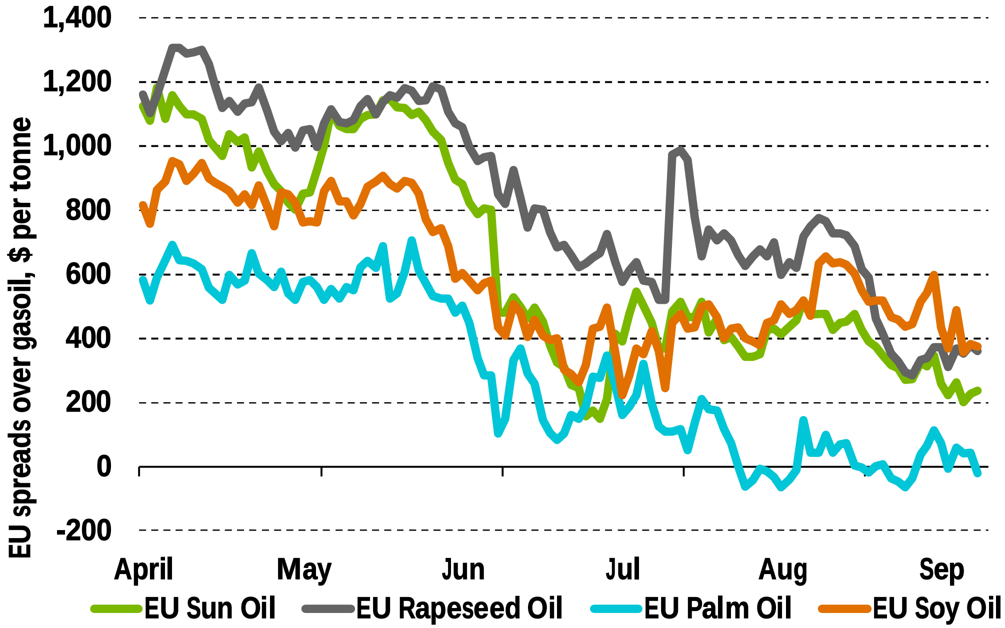


EU oils spreads over gasoil fell once the shock of the war had been absorbed, with CPO very close to gasoil since July.

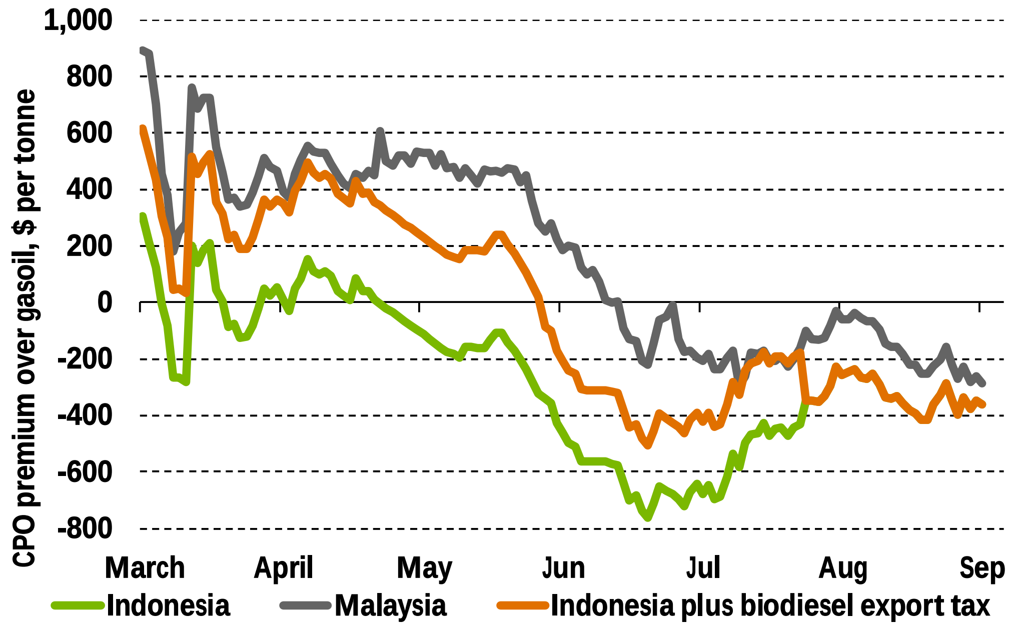
S.E. Asian CPO is much cheaper, as a result of export taxes. Malaysian and Indonesian CPO prices have recently been well below gasoil. Malaysia's CPO discount on gasoil since June averaged $150. Indonesia also applies export taxes to biodiesel. Allowing for these taxes, its CPO used to make biodiesel for export averaged $320 below EU gasoil since June.

The scope for unsubsidised biodiesel in South East Asia to compete with fossil diesel underpins palm oil prices.

Rotterdam premia for the four major oils over gasoil



The competitiveness of South East Asian palm oil as a fuel



THE PETROLEUM MARKET

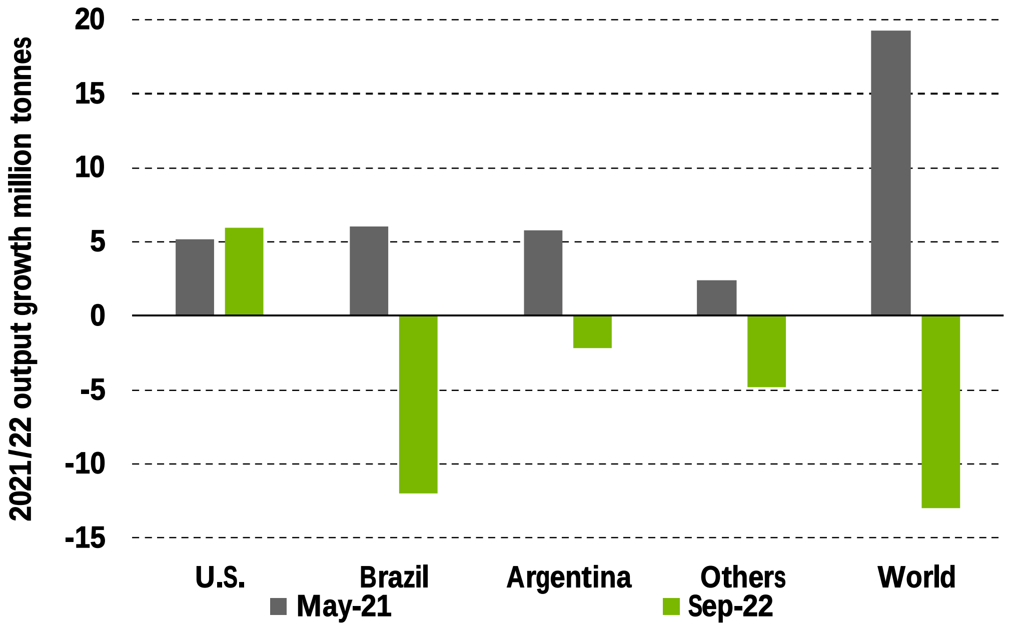
- For palm oil producers, the petroleum market is of importance in two main respects.
- First, because biodiesel is a distillate fuel, one must understand how the cost of palm oil in biodiesel compares with fossil diesel prices.
- This is because the potential for palm biodiesel to substitute for fossil diesel gives palm oil access to markets that do not have to rely upon government blending mandates.
- Second, until Putin's war, diesel traded at a relatively stable premium ("crack") over crude petroleum. The invasion has raised these cracks to unprecedented heights.
- Even in Europe, CPO has traded recently at close to parity with local diesel (gasoil).
- In South East Asia, thanks to export taxes, Malaysia and, especially, Indonesia, biodiesel can today be produced and exported more cheaply than diesel.

The outlook for soybean and other seed oils

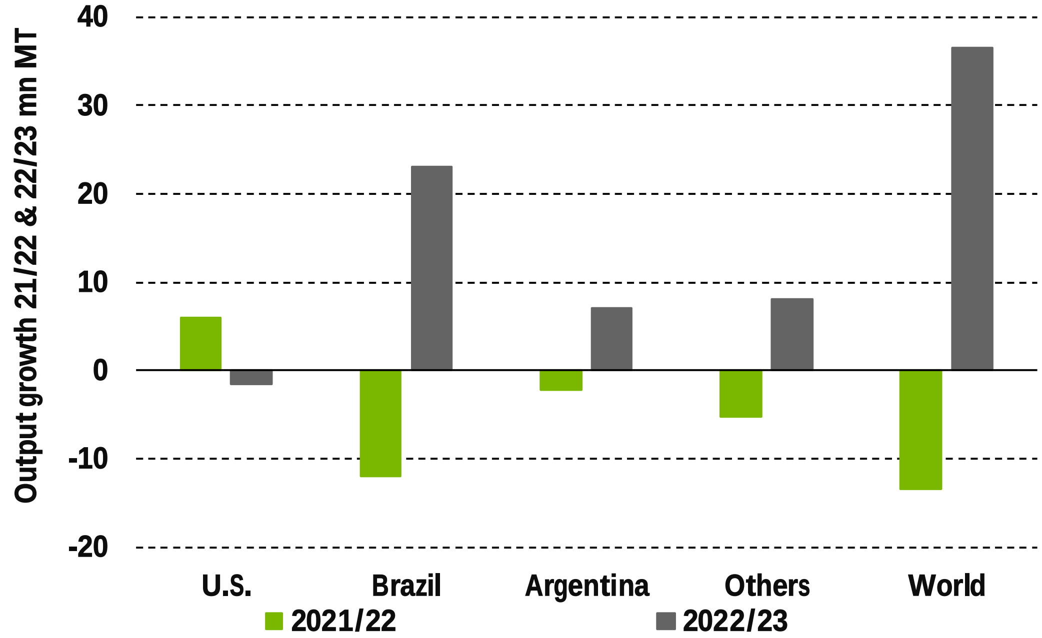
The 2021/22 crop year reveals the danger of basing full year soybean forecasts on the U.S. harvest. If we compare the first USDA forecasts of 2021/22 output growth with the final estimate, only the U.S. figure was close. Remember this when looking at the latest forecasts for 2022/23 and remind yourself that soybean output is not the same as soybean crushing.

Argentina is the key to soy oil exports and its new policy is easing oil supplies, whatever crop materialises this year, by encouraging farmers to sell some of their large bean stocks to crushers at the attractive “soybean dollar” exchange rates.

initial and final 2021/22 WASDE soybean production estimates

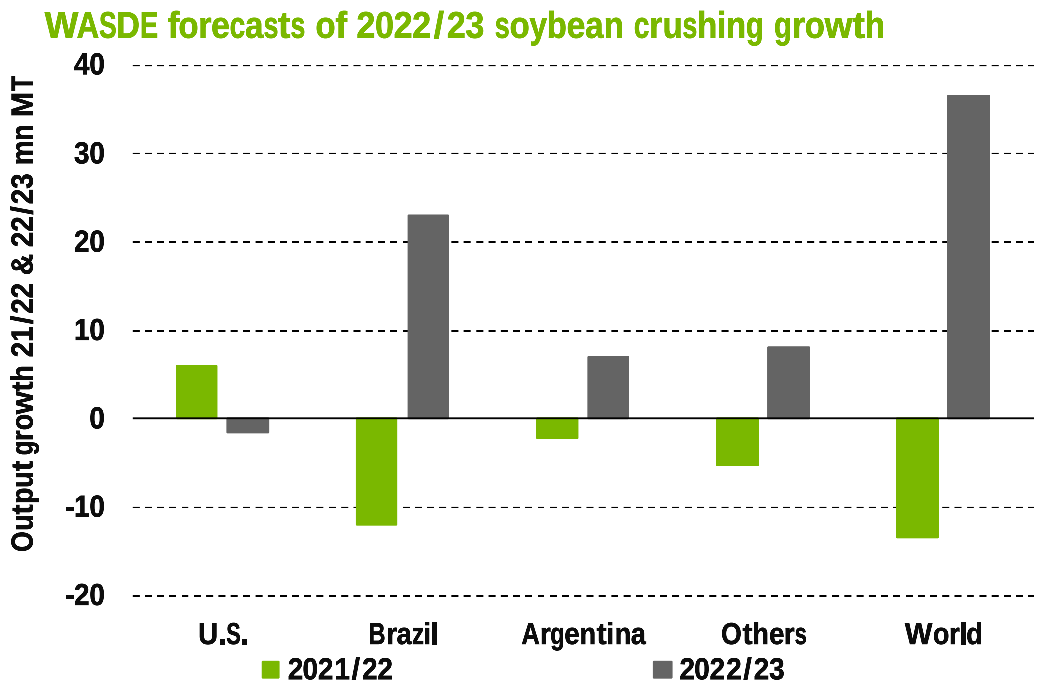


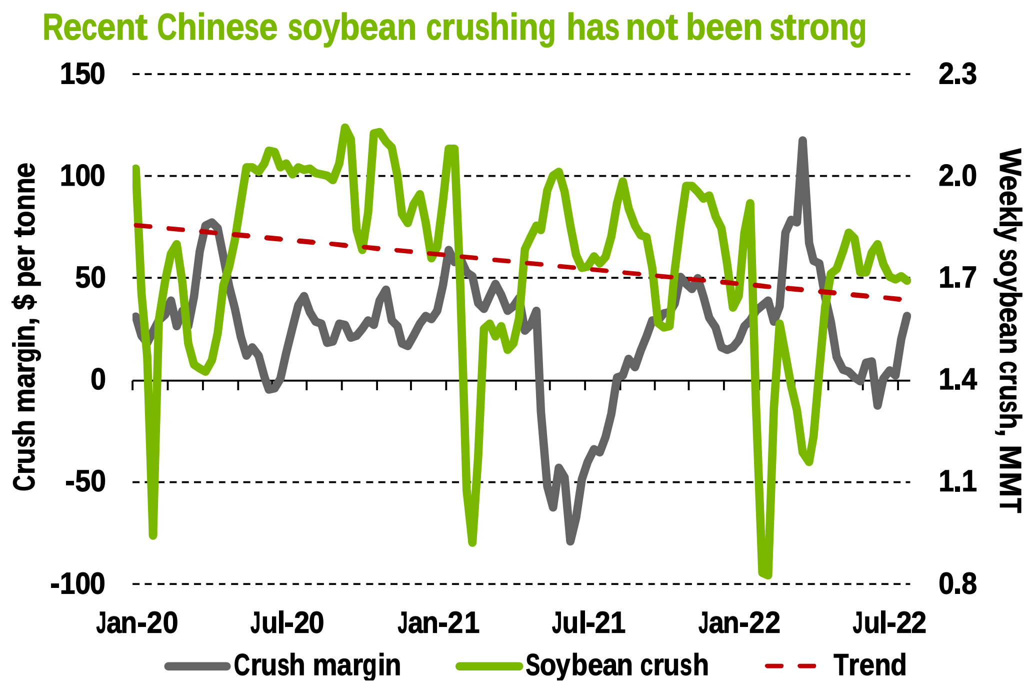
USDA WASDE’s 2022/23 soybean production projections



China is much the largest soybean crusher. It obtains 18 million tonnes of soybean oil from crushing imported beans. Swings in Chinese crushing dominate the trend in world soy oil supply. Last year, China led the way down; this year, the WASDE forecasts expect China to contribute 60% of an overall increase of 2.5 million tonnes in global soy oil production.

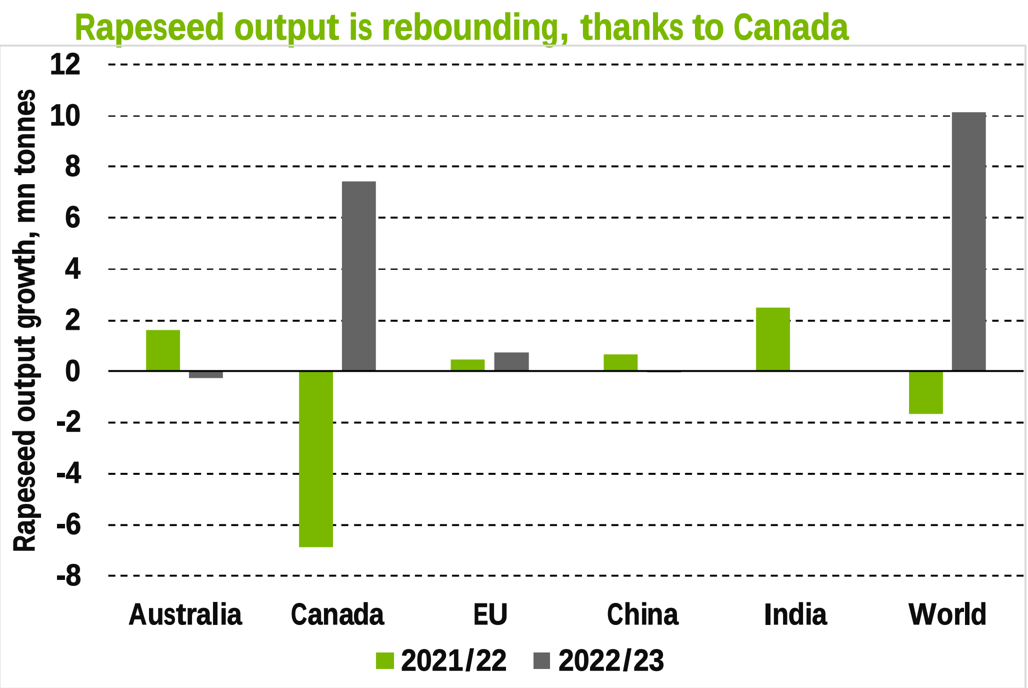
The right diagram tracks China's weekly soybean crush. Every Chinese New Year there is a sharp drop but it is clear that the trend since 2020 is down. You must make up your own mind whether China can reverse this trend as WASDE predicts.

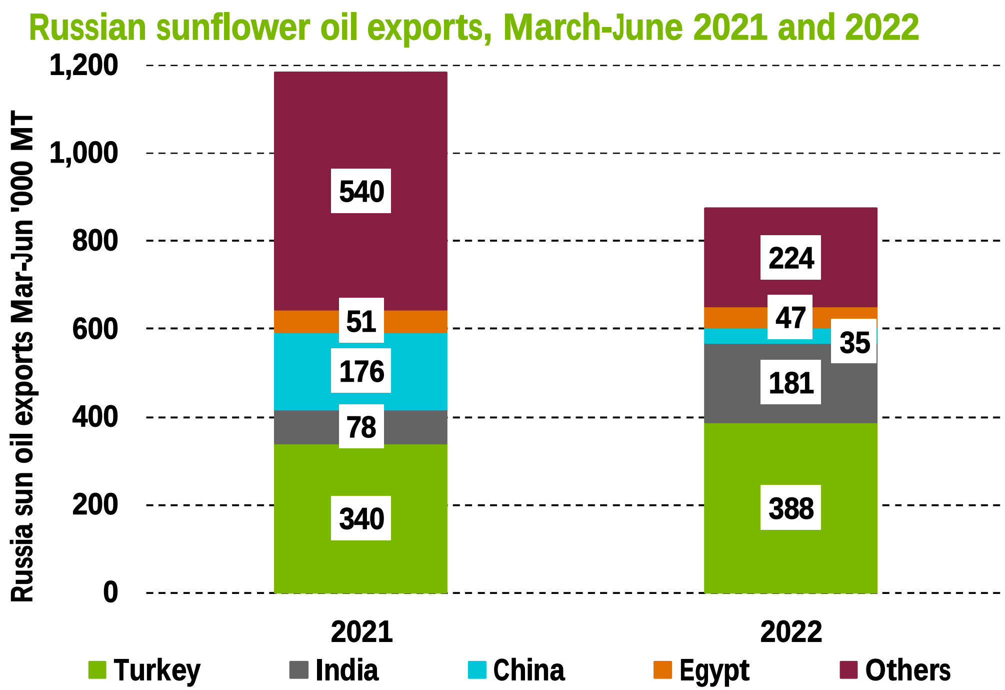




Rapeseed output (with over 40% oil) is surging this year led by Canada's recovery. A good Indian performance in 2021/22 was due to its mustardseed crop, which added 1 million tonnes to its local oil supply, reducing its oil imports in mid-2022.

The war halted Ukrainian sunflower oil exports; yet Russian exports since March are 30% below 2021 due to EU sanctions, leaving Turkey and India as the main markets. Sunflower oil from other sources, including EU crushing of Ukrainian seeds, is rising, as the new harvest arrives, and this has made sunflower oil the closest competitor to palm oil on price today.





THE ANNUAL CROPS: SOYBEAN, RAPESEED AND SUNFLOWER

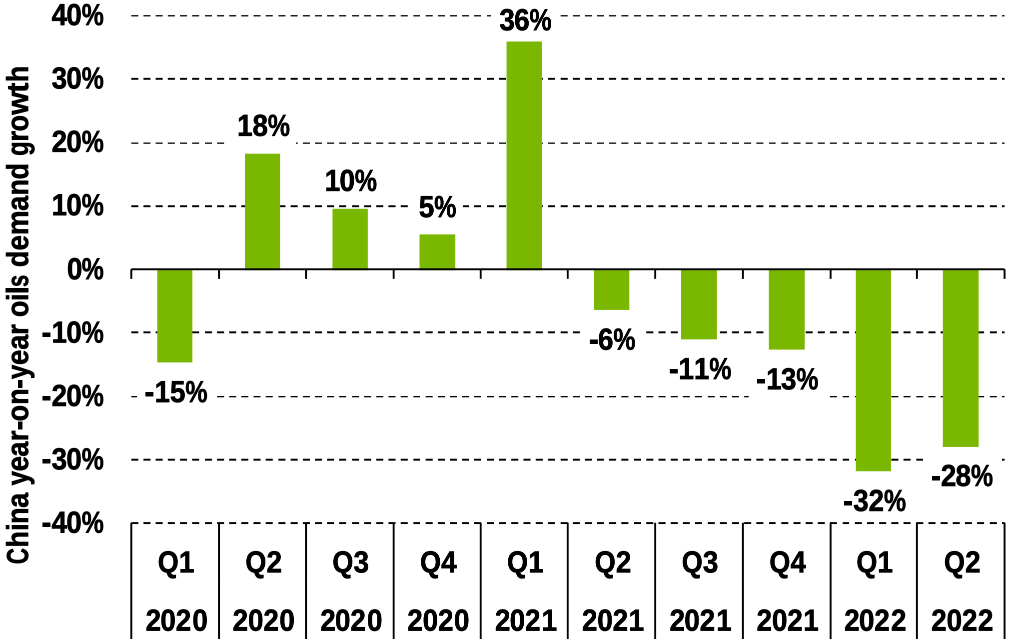
- Initial forecasts of 2021/22's soybean crop assumed normal weather. In reality, the South American crop was harmed by La Niña and instead of growth there was a sharp decline.
- The early forecasts for 2022/23 will also face an extended La Niña, but at this early stage of the crop year large increases in soybean production are forecast.
- Soy oil supply depends on crushing, not bean output. China led the world crush down in 2021/22. Soy oil output growth in 2022/23 hangs on China's recovery though Argentina's introduction of a "soybean $" is attracting soybeans out of farmers' stocks for crushing.
- Rapeseed production is reviving after a dreadful 2021/22 Canadian crop due to La Niña.
- Sunflower oil supply is a victim of Putin's war in Ukraine, the largest exporter. Russian exports are running below pre-war levels but oil output away from Ukraine has grown.
- Overall oil output from seeds should be higher in 2022/23.

Demand for oils

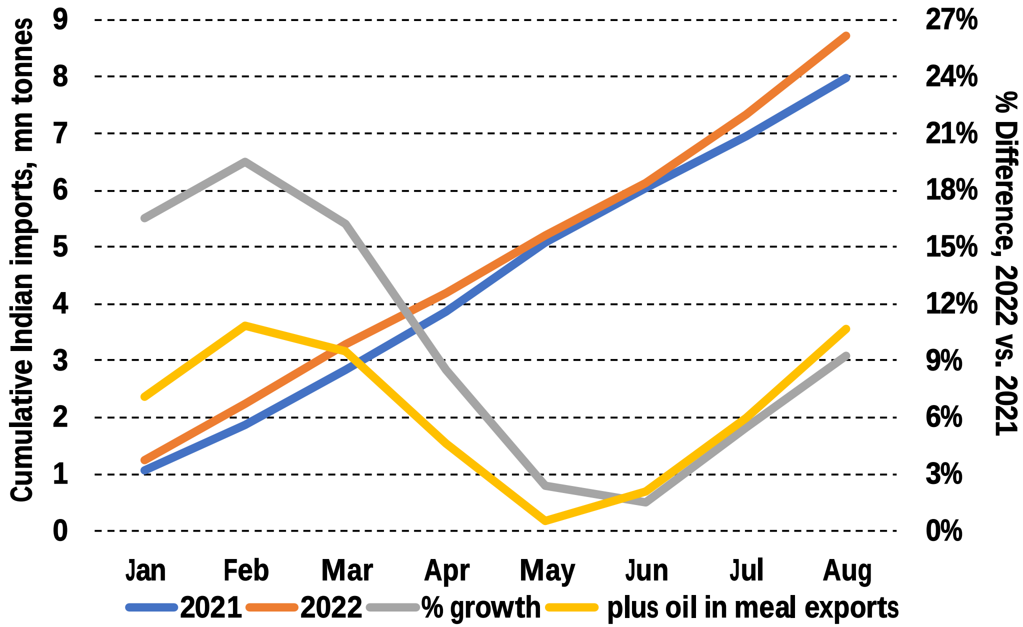
It is no surprise after seeing the crushing data that Chinese oils demand is weak, falling year-on-year for five quarters.

The contrast with India, the other 25-30 million tonne oils market, is remarkable. I plot two indicators of monthly Indian oils demand. One is cumulative oils imports. They started 2022 with high growth but slowed in mid-year before growing again. The other works from growth in meal exports to estimate the increase in oil output from the local crush (notably of mustardseed) and assume it was all consumed locally. On that basis, oil demand is up 11% in the year until August.

Chinese demand for vegetable oils has been extremely weak



While Indian oils demand has been surprisingly strong



THE CONSUMPTION OF VEGETABLE OILS

- It is clear that the trends in vegetable oil demand in the world's two most populous countries and largest oils consumers are pulling in opposite directions.
- Chinese soy oil supplies have fallen as crushing slows while RBD olein imports have been weak. National data on vegetable oil consumption reveal continuing demanddeclines.
- Continuing harsh Covid lockdowns and macro concerns about over-heated property markets suggest that China's demand for oils will remain sluggish.
- India, the world's largest oils importer, presents a totally different picture. Its imports in January-August are 9% ahead of 2021. This is on top of a record local rapeseed (mustardseed) crop. We estimate that total Indian January-August supply of vegetable oils is 11% ahead of 2021.
- We wait to see who will win this battle of the oils consumption giants.

The biggest source of oil – palm oil

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These diagrams plot palm oil exports and stocks. (*They do not include biodiesel or oleochemicals.)* Malaysian exports are back where they were 15 years ago. The trend in Indonesian exports is back where it was 5 years ago. This is less of a surprise as the system of export taxes and levies was always intended to boost local demand and lift world market prices.

In stocks, we see the leap in Indonesia as a result of Domestic Marketing Order export limits. The current export wave will bring its stocks back down but partly by shifting them to Malaysia whose stocks will jump towards 3 million tonnes.

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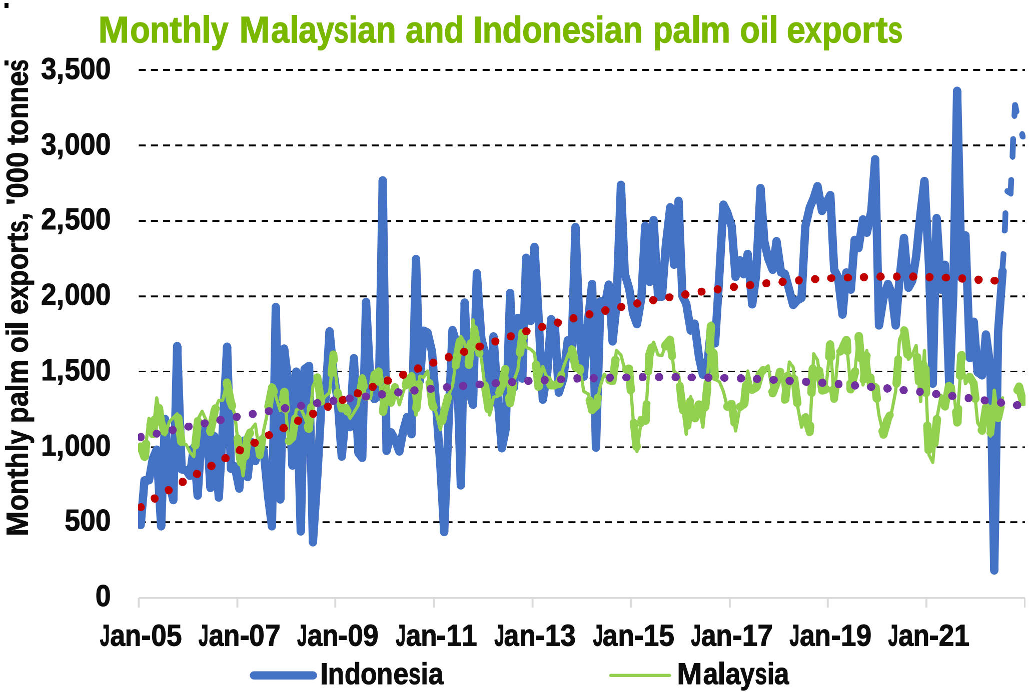
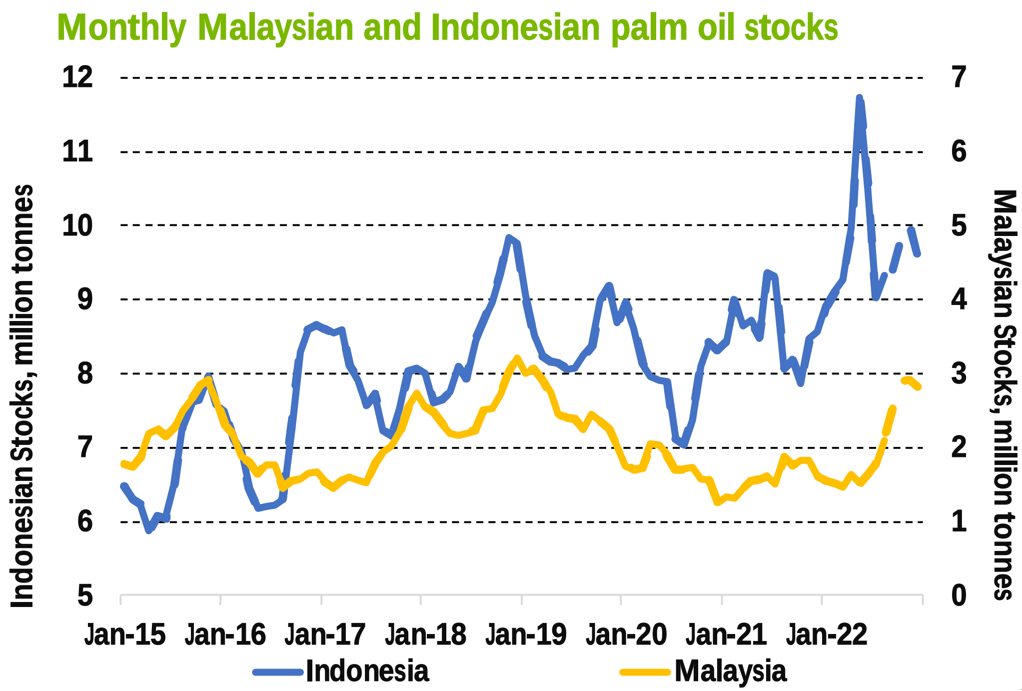
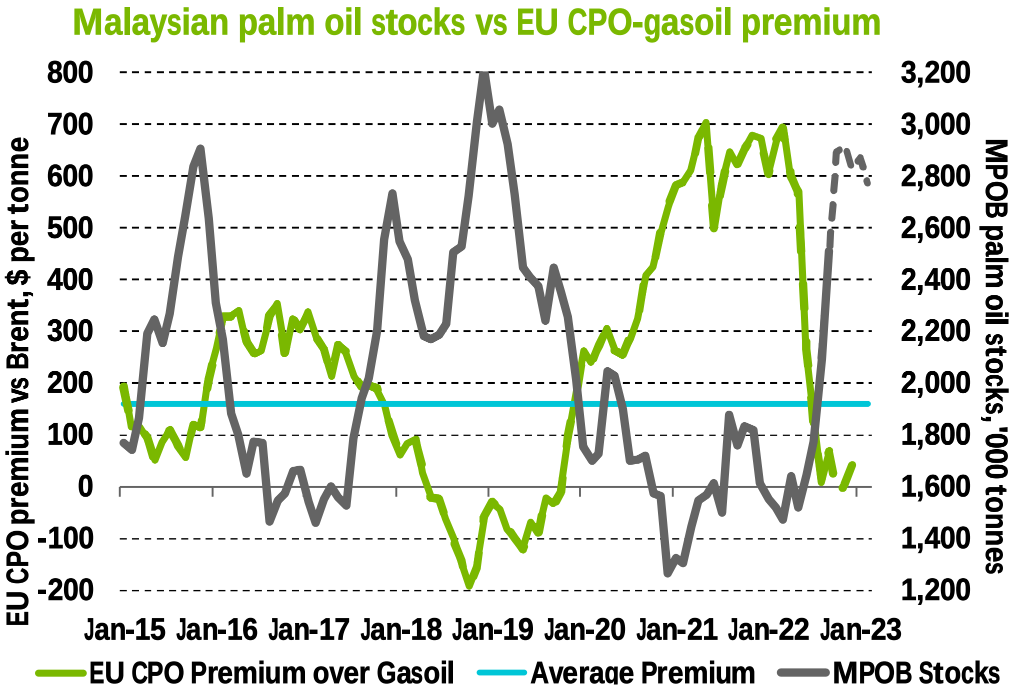
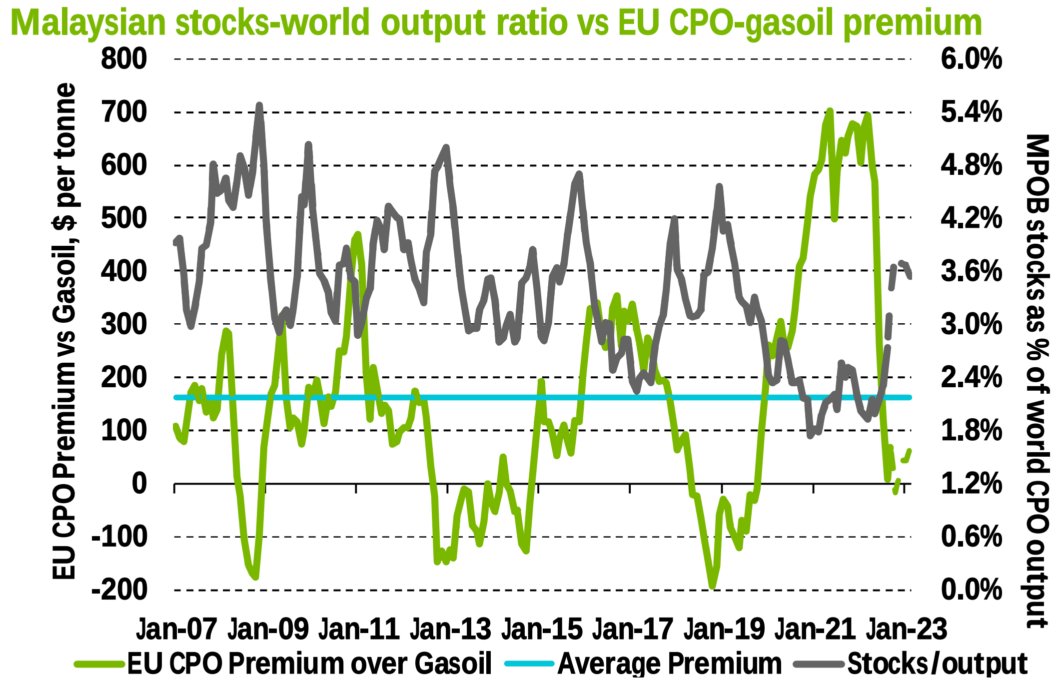




These diagrams contrast alternative ways to express palm oil stock tightness. The left one compares the EU CPO-gasoil premium against the level of Malaysian stocks. High stocks imply a lower premium and vice versa.

A better inverse correlation is in the right diagram expressing MPOB stocks as a % of world palm oil output. MPOB stocks are the only ones the market knows for sure and are available when needed. The recent past when Indonesia had large stocks but could not export them reinforces this view. As the stock-output ratio rises, the CPO premium falls back to zero.





THE SUPPLY OF PALM OIL FROM SOUTH EAST ASIA

- It may be as a surprise to see that exports of palm oil, excluding more highly processed products, have stopped rising from Malaysia and Indonesia.
- This is why palm oil importers are turning increasingly to Latin America for supplies.
- The gradual easing (though not yet the removal) of export controls in Indonesia is pulling Indonesian stocks down from peak levels and forcing Malaysia to hold higher stocks.
- There is a well-defined inverse (i.e., negative) relationship between Malaysian stock levels and the EU CPO premium over gasoil, where we choose gasoil rather than crude petroleum since the vegetable oil used to make in biodiesel competes with gasoil.
- For the past two months, EU CPO has traded at close to parity with gasoil. This means that palm biodiesel in South East Asia has become competitive as an unsubsidised fuel.
- For the next few months the CPO price will be determined by gasoil.

CONCLUSIONS

- More than ever, in order to understand world vegetable oil prices you must analyse the petroleum “cracks”. Mr Putin has made it vital to follow diesel even more than crude oil.
- Rising inflation and interest rates make recession inevitable, while relatively good oil crop harvests are expected as long as La Niña does not again cut yields in S. America.
- On the demand side signals are very mixed. China is battling a property sector bubble and Covid lockdowns. India, in contrast, has seen oils demand growing strongly this year.
- The oils market, led by palm as always, faces the enforced build-up of Indonesian stocks, which are now struggling to be exported, pulling CPO to large discounts to other oils and making unsubsidised biodiesel competitive with diesel in Indonesia and Malaysia.
- With the rise in Malaysian stocks, EU CPO will remain at parity or a discount to gasoil.
  - WATCH GASOIL PRICES AND CRACKS LIKE A HAWK!

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Thanks